

ANTENNA  
SPECIFICATION

**Applicant:** Shenzhen HENGXINDA COMMUNICATION Tech Co., Ltd  
**Address:** NO. 306, HuiHuang Building, Waada Road, Great Wave Street, LongHua District, Shenzhen, Guangdong, China  
**Model Name:** 2.4G ANT

**Brand Name:** N/A  
**Test Standard:** ANSI/IEEE Std 149-1979  
**Test Date:** 12. 09, 2022

**ISSUED BY:**  
Shenzhen HENGXINDA COMMUNICATION Tech Co., Ltd.

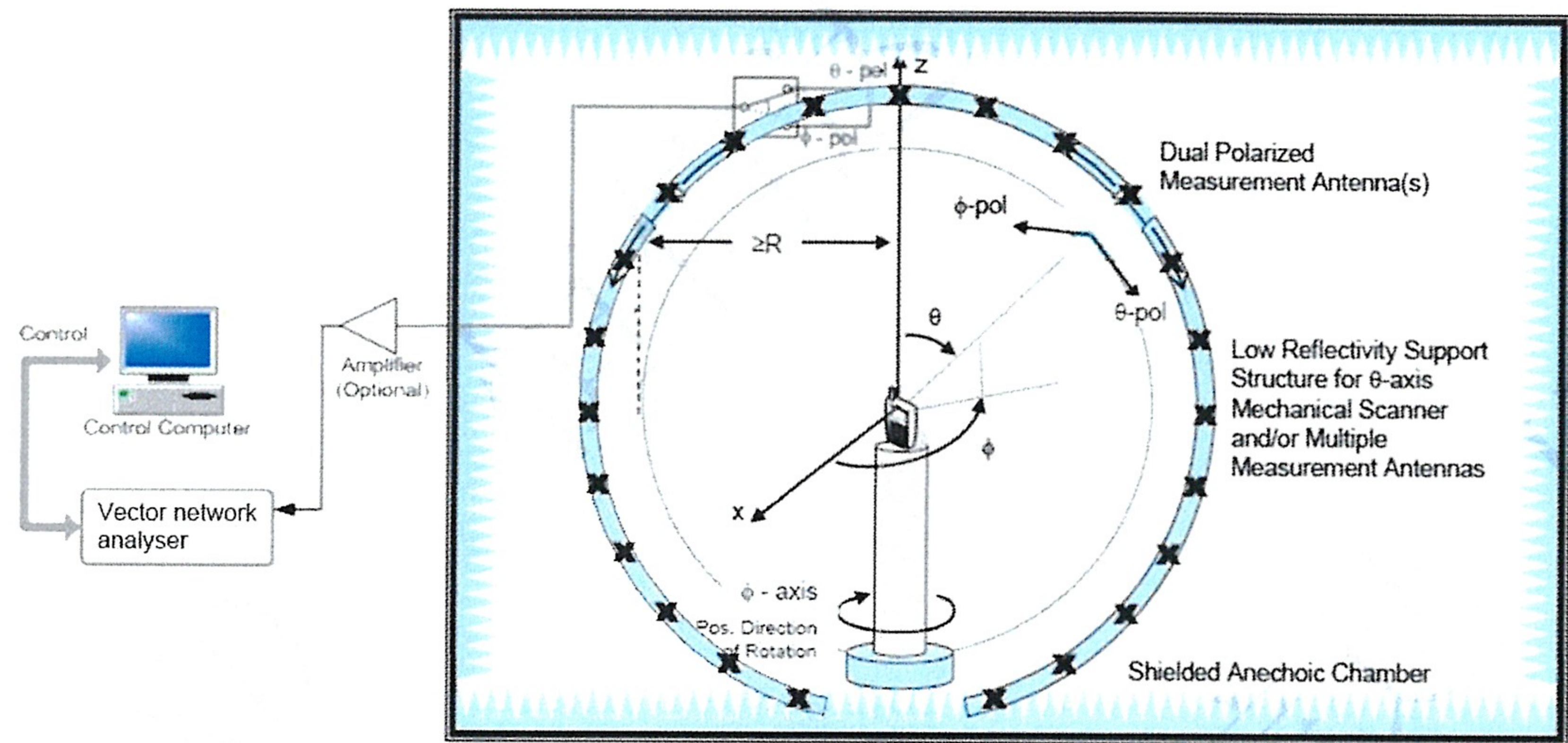
|                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Tested by:</b>                                                                   | <b>Checked by:</b>                                                                   | <b>Approved by:</b>                                                                   |
|  |  |  |

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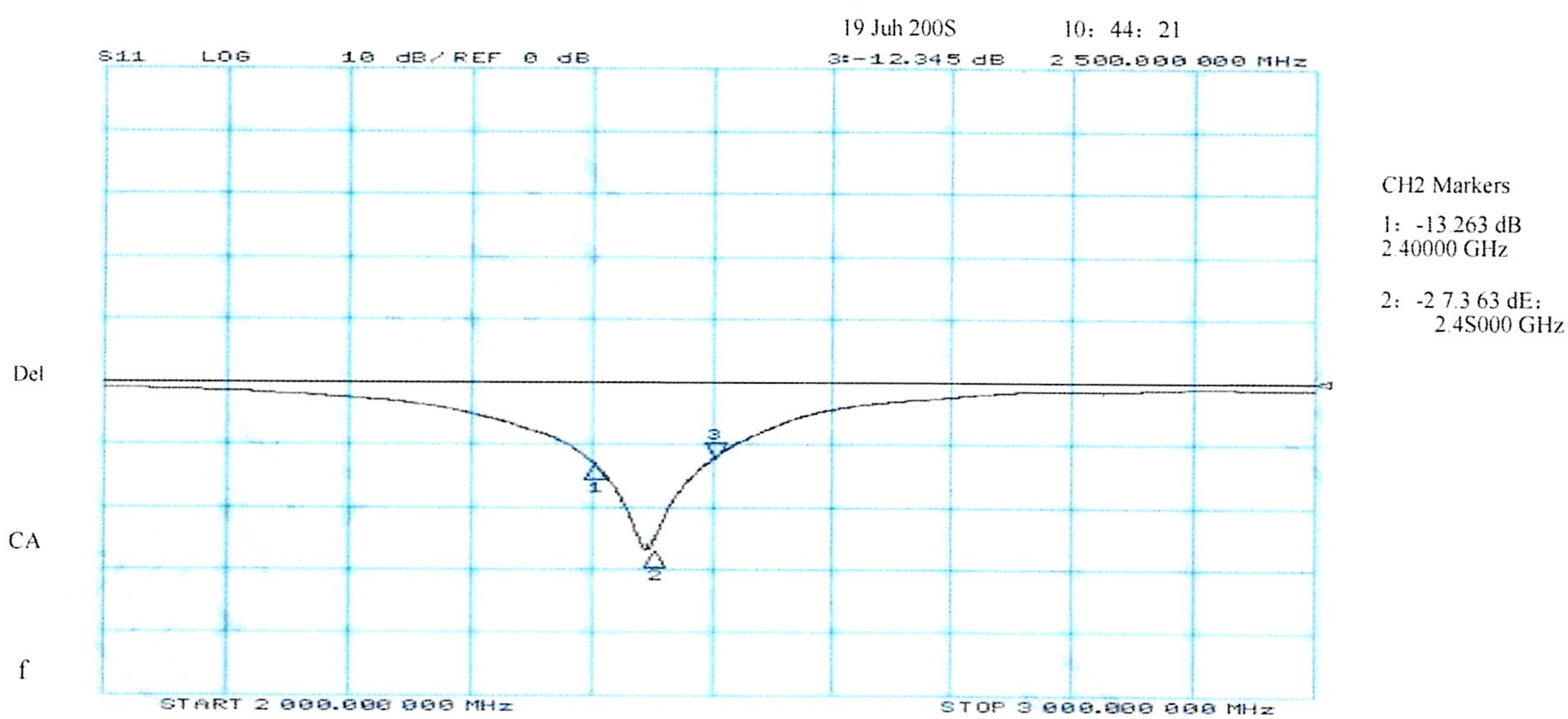
Test Equipment List

Antenna gain, efficiency and radiation pattern test setup

| Description                                 | Manufacturer | Model  | Serial No.   | Cal. Date  | Cal. Due   |
|---------------------------------------------|--------------|--------|--------------|------------|------------|
| SG24 Multi-probe Antenna Measurement System | SATIMO       | SG24-L | 1101855-0001 | 2021.11.12 | 2024.11.11 |
| Vector Network Analyzer                     | Agilent      | E5071B | MY42404001   | 2022.04.02 | 2023.04.01 |
| Description                                 | Manufacturer | Name   |              | Version    |            |
| Test Software                               | MVG          | SPM    |              | V 1.8      |            |



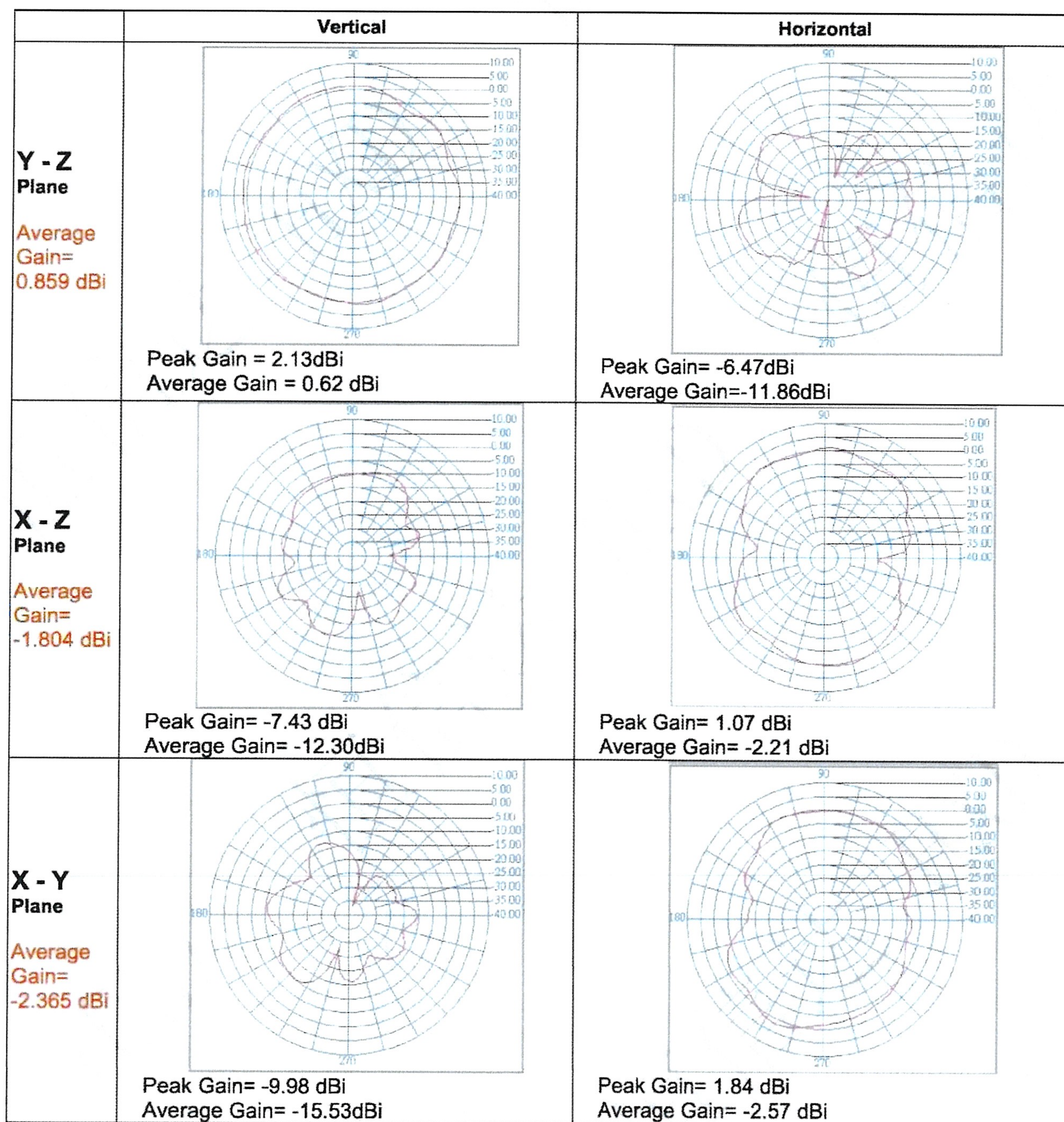
Antenna S11 on Test Board And Gain and Efficiency



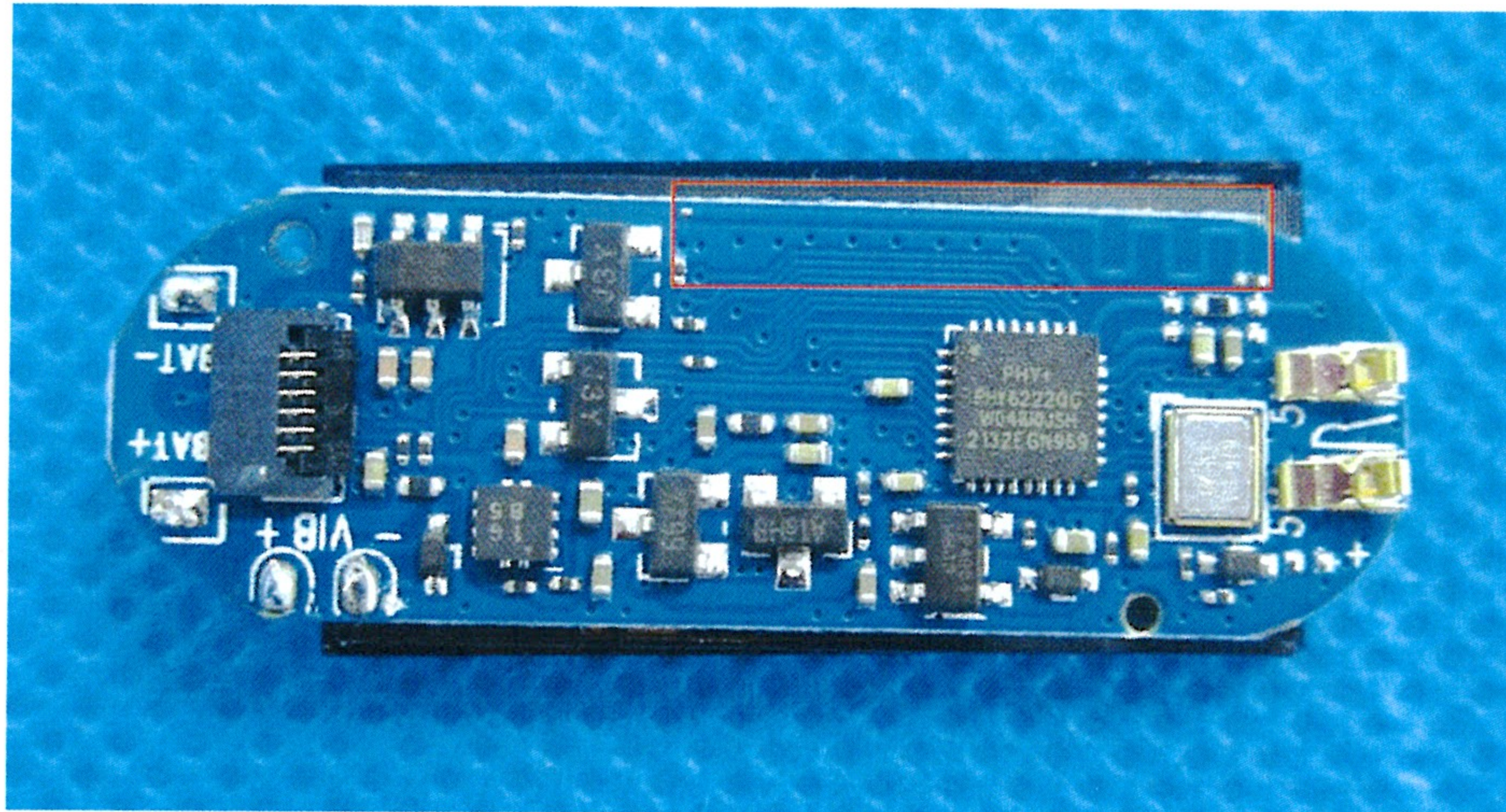
| Frequency | Gain (dBi) | Efficiency (%) |
|-----------|------------|----------------|
| 2400MHz   | 0.93       | 46             |
| 2410MHz   | 1.03       | 48             |
| 2420MHz   | 1.23       | 49             |
| 2430MHz   | 1.27       | 50             |
| 2440MHz   | 0.99       | 49             |
| 2450MHz   | 1.02       | 51             |
| 2460MHz   | 1.27       | 51             |
| 2470MHz   | 1.41       | 52             |
| 2480MHz   | 1.42       | 52             |
| 2490MHz   | 1.42       | 52             |
| 2500MHz   | 1.24       | 52             |

## RADIATION PATTERN

Radiation Pattern and Gain were dependent on measurement board design. The specification of subject antenna was measured based on the PCB size and installation position as shown in the below figure Test Board



EUT PHOTO:



APPLICATIONS

- 1. 2.4GHz ISM band RF applications
- 2. Bluetooth, Wireless, HomeRF

|                     |                         |
|---------------------|-------------------------|
| Model Name          | 2.4G ANT                |
| Polarization        | Horizontal and Vertical |
| Azimuth Beam Patten | Omni-directional        |
| Impedance           | 50 Ohm                  |
| Antenna Lenght      | 32mm                    |

Technical Information

|                  |                                                                                                   |
|------------------|---------------------------------------------------------------------------------------------------|
| Test Frequencies | 2400MHz, 2410MHz, 2420MHz, 2430MHz, 2440MHz, 2450MHz, 2460MHz, 2470MHz, 2480MHz, 2490MHz, 2500MHz |
|------------------|---------------------------------------------------------------------------------------------------|

# 3D Pattern

